

Small Signal Product

Surface Mount Schottky Barrier

FEATURES

- Designed for mounting on small surface
- Extremely thin/leadless package
- Low capacitance
- Low forward voltage drop
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21


0603

MECHANICAL DATA

- Case: 0603
- Terminal: Gold plated, solderable per MIL-STD-750, method 2026
- Polarity: Indicated by cathode band
- Weight: 3 mg (approximately)
- Marking code: BC

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}	40	V
DC Reverse Voltage	V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Forward Current	I_O	200	mA
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rate Load	I_{FSM}	600	mA
Power Dissipation	P_d	150	mW
Forward Voltage $I_F = 1.0 \text{ mA}$ $I_F = 40 \text{ mA}$	V_F	0.38	V
		1.0	
Reverse Leakage Current $V_R = 30 \text{ V}$	I_R	0.2	μA
Typical Capacitance Between Terminals $V_R = 0 \text{ V}$, $f = 1.0 \text{ MHz}$ Reverse Voltage	C_J	5	pF
Reverse Recovery Time ($I_F = I_R = 10 \text{ mA}$, $I_{RR} = 0.1 \times I_R$, $R_L = 100 \Omega$)	t_{rr}	5	ns
Junction Temperature	T_J	-65 to +125	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-65 to +125	$^{\circ}\text{C}$

Small Signal Product

RATINGS AND CHARACTERISTICS CURVES

($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Fig.1 Forward Characteristics

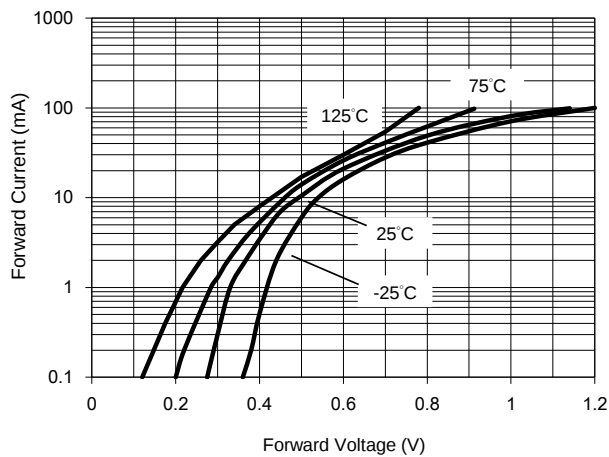


Fig. 2 Reverse Characteristics

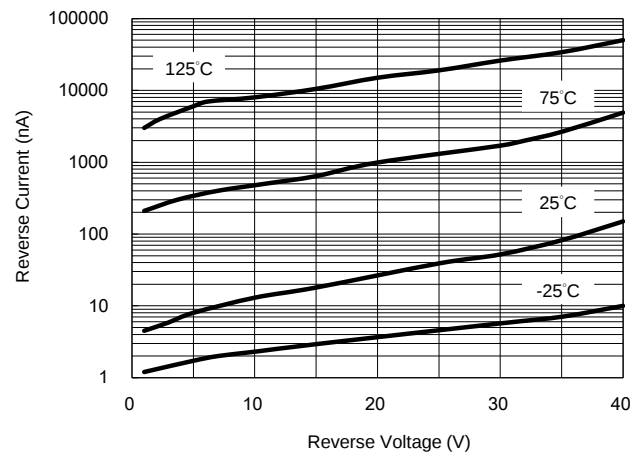
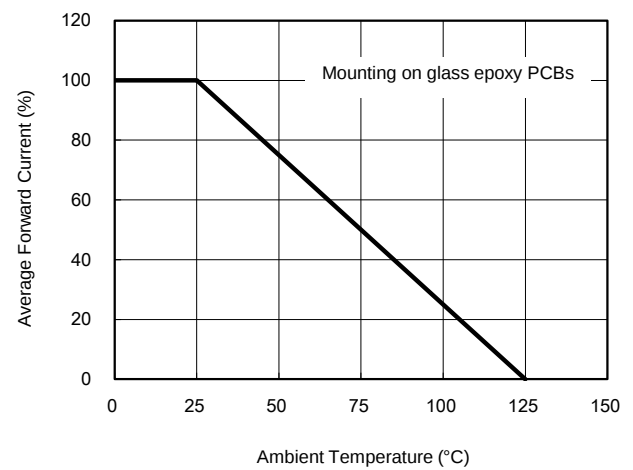
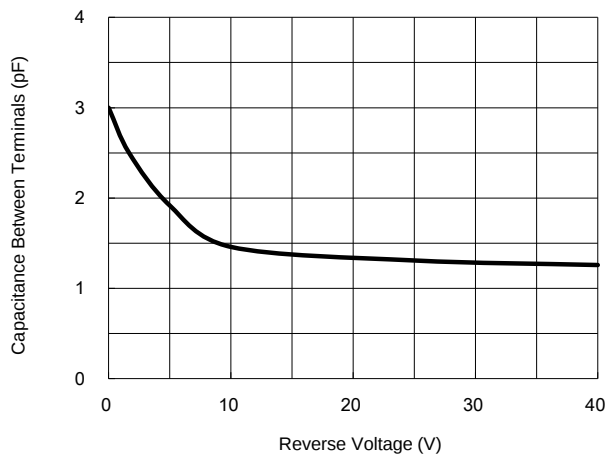


Fig. 3 Capacitance Between Terminals Characteristics



Small Signal Product

ORDERING INFORMATION

PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
TSS40U	RG	G	0603	4K / 7" Reel

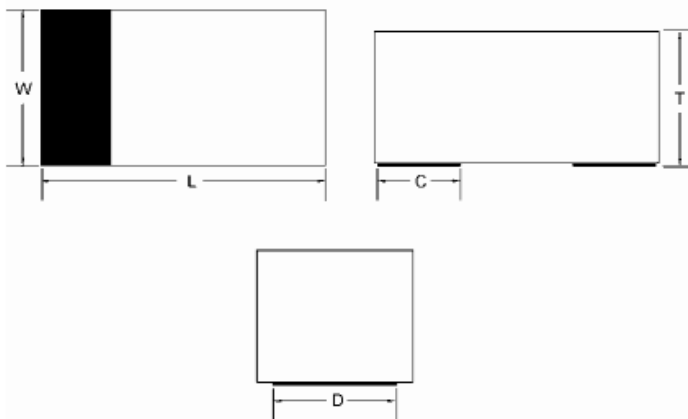
Note: Whole series with green compound

EXAMPLE

EXAMPLE PART NO.	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TSS40U RGG	TSS40U	RG	G	Green compound

PACKAGE OUTLINE DIMENSION

0603



DIM.	Unit (mm)			Unit (inch)		
	Min	Typ.	Max	Min	Typ.	Max
L	1.60	-	1.80	0.063	-	0.071
W	0.80	-	1.00	0.031	-	0.039
T	0.70	-	0.85	0.028	-	0.033
C	-	0.45	-	-	0.018	-
D	-	0.70	-	-	0.028	-

Notice

Specifications of the products displayed herein are subject to change without notice. TSC or anyone on its behalf, assumes no responsibility or liability for any errors or inaccuracies.

Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in TSC's terms and conditions of sale for such products, TSC assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of TSC products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify TSC for any damages resulting from such improper use or sale.